

IN THE CLAIMS:

Please cancel claims 15-17 without prejudice or disclaimer of the subject matter thereof.

The following is a complete listing of claims in this application.

1. (currently amended) A liquid soil conditioning composition comprising an aqueous dispersion of calcium carbonate and sulfur, the calcium and sulfur being in an effective amount in the aqueous dispersion to form calcium sulfate, in situ, in the soil structure, wherein the atomic ratio of calcium to sulfur is in the range of 0.5:1 to 2.0:1.

2. (original) liquid soil conditioning composition as defined in claim 1 wherein the atomic ratio of calcium to sulfur is in the range of 0.75:1 to 1.5:1.

3. (original) liquid soil conditioning composition as defined in claim 2 wherein the atomic ratio of calcium to sulfur is in the range of 0.9:1 to 1.3:1.

4. (previously presented) A liquid soil conditioning composition as defined in claim 1 wherein the composition includes a suspension or dispersing agent.

5. (previously presented) A liquid soil conditioning composition as defined in claim 4 wherein the suspension or dispersing agent is selected from the group consisting of bentonite and polyvinylalcohol.

6. (previously presented) A liquid soil conditioning composition as defined in claim 1 wherein the calcium carbonate is in non amorphous form.

7. (original) A liquid soil conditioning composition as defined in claim 6 wherein the calcium carbonate is rock lime.

8. (currently amended) A liquid soil conditioning composition comprising calcium carbonate in the form of rock lime and sulfur suspended in water wherein the rock lime has a

particle size average diameter of less than 10 μm with a maximum particle size of 50 μm and the atomic ratio of calcium to sulfur is in the range of 0.5:1 to 2.0:1.

9. (original) A liquid soil conditioning composition as defined in claim 8 wherein the average diameter is less than 5 μm with a maximum particle size 25 μm .

10. (previously presented) A liquid soil conditioning composition as defined in claim 8 wherein the composition further comprises a suspension or dispersing agent that is a water soluble polymer.

11. (original) A liquid soil conditioning composition as defined in claim 10 wherein the water soluble polymer is polyvinylalcohol.

12. (previously presented) A liquid soil conditioning composition as defined in claim 9 wherein the composition comprises 700 - 1000 g/litre of water of calcium carbonate.

13. (original) A liquid soil conditioning composition as defined in claim 12 wherein the amount of calcium carbonate is about 900 g/litre of water.

14. (currently amended) A method of improving agricultural productivity of clay soils without substantially changing the pH of the soil by applying ~~an effective amount of~~ a liquid soil conditioning composition in the form of an aqueous dispersion of calcium carbonate and sulfur, ~~wherein~~ the atomic ratio of calcium to sulfur ~~is~~ being in the range of 0.5:1 to 2.0:1, the liquid conditioning composition being applied in an effective amount to form calcium sulfate in situ with the soil structure.

Claims 15-17 (canceled).

18. (new) The method of claim 14 wherein the calcium carbonate is in non amorphous form.

19. (new) The method of claim 14 wherein the calcium

carbonate is rock lime.

20. (new) The method of claim 19 wherein the rock lime has a particle size average diameter of less than 10 μm with a maximum particle size of 50 μm .

21. (new) The method of claim 20 wherein the particle size average diameter is less than 5 μm with a maximum particle size of 25 μm .

22. (new) The method of claim 14 wherein the liquid soil conditioning composition further comprises a suspension or dispersing agent.

23. (new) The method of claim 14 wherein the liquid soil conditioning composition comprises 700-1000 g/litre of calcium carbonate.